

# Approved Standards for Scientific Testimony and Reporting for Serology

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# Approved Standards for Scientific Testimony and Reporting for Serology

## 1 INTRODUCTION

This document provides examples of statements that are approved for reporting scientifically supported conclusions and offering expert opinions during testimony by Forensic Examiners within the FBI Laboratory's biology discipline, also called the DNA discipline. It is noted that these examples are not intended to be all inclusive and may be dependent upon the precedent set by the judge or locality in which a testimony is provided. Further, these examples are not intended to serve as precedent for other forensic laboratories and do not imply that statements by other forensic laboratories are incorrect, indefensible, or erroneous.

## 2 SCOPE

This document applies to Forensic Examiners who prepare an FBI *Laboratory Report* (7-1 or 7-1 LIMS) and/or provide testimony related to serological examinations. This document applies to reports and to testimony based on reports that are finalized after its effective date.

## 3 RESPONSIBILITIES

- A. The Examiner will ensure that a *Laboratory Report* is consistent with the approved language contained within this document.
- B. The Examiner will ensure that his/her testimony related to serological examinations is consistent with the standards contained within this document.
- C. The Technical Reviewer will ensure that a *Laboratory Report* contains language consistent with the standards contained within this document.
- D. An authorized evaluator will assess if testimony provided by DNA personnel complies with the statements contained within this document in accordance with the FBI Laboratory Quality Assurance Manual (LAB-100) section for monitoring of testimony related activities.

## 4 STATEMENTS APPROVED FOR FBI SEROLOGICAL EXAMINATION TESTIMONY AND/OR LABORATORY REPORTS

The results of presumptive and/or confirmatory serological tests are used in conjunction to develop a conclusion. The reported conclusion is based on the most informative results in the following order: 1) a positive confirmatory test result, 2) a positive presumptive test result, 3) an inconclusive result, or 4) a negative result. For example, if a presumptive test is positive and a confirmatory test is negative or inconclusive, the reported conclusion is based on the positive presumptive test.

### 4.1 Identification of Blood or Semen

The Examiner may state or imply that blood or semen was identified on an item of evidence when a positive result is obtained from the appropriate confirmatory testing procedure(s).

## 4.2 Indication of Blood or Semen

The Examiner may state or imply that blood or semen was indicated on an item of evidence when a positive result is obtained from the appropriate presumptive testing procedure(s).

## 4.3 Inconclusive Result

An Examiner may state or imply that no determination can be made regarding the presence or absence of blood or semen when an inconclusive result is obtained from the appropriate testing procedure(s).

## 4.4 Negative Result

An Examiner may state or imply that no blood or semen was detected on an item of evidence when a negative result is obtained from the appropriate testing procedure(s).

## 4.5 Error Rate

An Examiner may state or imply that the analytical processes and procedures used to support serology testing do not have a calculable error rate due to the unpredictability of human error. An Examiner may further explain that the FBI Laboratory has a quality system in place to minimize and/or identify potential procedural errors.

## 4.6 Limitations

### 4.6.1 Confirmatory Tests

An Examiner may state or imply that confirmatory testing procedures may yield false-negative results (i.e., no test signal when blood or semen is present) due to the sensitivity of such tests.

### 4.6.2 Presumptive Tests

An Examiner may state or imply that presumptive testing procedures may yield false-positive results (i.e., test signal in the presence of materials other than blood or semen) due to the lower specificity of such tests.

### 4.6.3 Negative Results

An Examiner may state or imply that the recovery of an insufficient quantity of blood or semen for detection and/or the recovery of biological material of insufficient quality can limit the ability to detect blood or semen using both presumptive and confirmatory testing procedures.

## 5 STATEMENTS NOT APPROVED FOR FBI SEROLOGICAL EXAMINATION TESTIMONY AND/OR LABORATORY REPORTS

### 5.1 Numerical Certainty

An Examiner may not state or imply that a level of numerical certainty is calculated to support the presumptive identification of blood or semen.

## 5.2 Zero Error Rate

An Examiner may not state or imply that serological examinations have a zero error rate or are infallible.

## 5.3 Reasonable Certainty

An examiner shall not use the expressions ‘reasonable degree of scientific certainty,’ ‘reasonable scientific certainty,’ or similar assertions of reasonable certainty in either reports or testimony unless required to do so by a judge or applicable law.

## 6 LABORATORY REPORT REVIEWS

The content of a *Laboratory Report* will be reviewed according to the Level 1 documents and the DNA Level 2 documents to ensure compliance with the standards contained within this document.

## 7 TESTIMONY REVIEWS

Testimony provided by DNA personnel will be reviewed in accordance with the Level 1 documents to ensure compliance with the standards contained within this document.

## 8 REFERENCES

United States. Department of Justice. Office of Legal Policy. *Forensic Science. Department of Justice Uniform Language for Testimony and Reports for the Forensic Serological Examinations.* Retrieved from the Department of Justice Web site: <https://www.justice.gov/olp/uniform-language-testimony-and-reports>.

## 9 REVISION HISTORY

Revision	Issue Date	Changes
00	08/15/2022	Reformatted DNA 709-2 into new template and assigned new Doc ID.